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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,659	10/26/2001	Glen B. Cook	SP01-302	4629

22928 7590 06/13/2005

CORNING INCORPORATED
SP-TI-3-1
CORNING, NY 14831

EXAMINER

HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/035,659

Applicant(s)

COOK ET AL.

Examiner

John Hoffmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/21/05, 2/25/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/21/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 February 2005 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 22-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Examiner could not find any support for using fiber preforms in conjunction with sacrificial preforms. The closest support that Examiner could find was the use of a single preform (not preforms) along with two sacrificial preforms. This is deemed to be

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a prima facie showing of lack of support. The burden is now on applicant to demonstrate sufficient support.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22, line 3 suggests that the sacrificial preforms are two of the "fiber preforms". However lines 5-6 indicates that the sacrificial preforms are not the fiber preforms. Since these two things contradict each other, it is deemed that one of ordinary skill would not know how to interpret the claims. There is no antecedent basis for "the lower sacrificial preform". It is unclear if this requires that there be a lower sacrificial preform.

The last line of the claim calls for a sacrificial preform. To one of ordinary skill this suggests that the sacrificial preform is sacrificed (thrown away) – however the last line of the claim also requires that the optical fiber is made from the sacrificial preform – which suggests it is NOT sacrificed. Examiner then looked to the specification to see if there was any definition for "sacrificial preform" and could not find any.

See Allen Eng'g Corp. V. Bartell Indus. Inc. 299 F 3d 1336, 1348, 63 USPQ2d 1769, 1775 (Fed. Cir. 2002) (quoting Personalized Media Communications, LLC v. Int'l Trade

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Comm'n, 161 F.3d 696, 705, 48 USPQ2d 1880, 1888 (Fed. Cir. 1998)) ("In determining whether the claim is sufficiently definite, we must analyze whether "one skilled in the art would understand the bounds of the claim when read in light of the specification.") See also, Exxon Research & Eng'g Co. v. United States, 265 F.3d 1371, 1375, 60 USPQ2d 1272, 1276 (Fed. Cir. 2001) (citation omitted) (patent claims must be "sufficiently precise to permit a potential competitor to determine whether or not he is infringing").

For the reasons given above, a potential competitor would not be able to tell whether any particular perform is or is not a sacrificial preform and thus could not determine whether or not he is infringing.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeNoane 4407667 (or Sterling 4195980) in view of Gwo 6284085. . (Note: other references are used as evidence as to what is inherent)

LeNoane (as well as Sterling) discloses the bonding of glass preforms, but not the temperature limitation. Gwo teaches that one can create a strong room-temperature bond in a manner which is simple and inexpensive. IT would have been obvious to

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change the LeNoane (or the Sterling) process, by using the improved bonding procedure of Gwo, for the advantages of Gwo. Relevant portions of Gwo include the abstract, col. 1, lines 22-29; from col. 1, line 61 to col. 2, line 19; col. 3, lines 37-62; col. 6, lines 42-62.

As to the flatness limitation of 5 microns (which is not taught in LeNoane or Sterling) : See Gwo, col. 7, lines 12-15, especially col. 6, lines 24-41 which discloses microroughness, and filling sub-micro-meter gaps. Col. 5, lines 16-19 discloses that one doesn't have to use a silicate if the mismatch is small. Also, col. 5, line 14 refers to "precision bonding". It would have been obvious to have the surfaces as flat as possible so as to avoid the need for adding a silicate and to most precisely bond the objects.

As to the sacrificial preforms. First it is noted that Examiner could not find a definition for "sacrificial preform". It is deemed that sacrifice is an intended use limitation that does not define over the LeNoane or Sterling methods. For example, one can designate that every even numbered preform is a regular fiber preform, and every odd numbered preform is a sacrificial preform. Most importantly, claim 22 requires drawing the optical fiber from the sacrificial preform. Clearly since Applicant's 'method of forming an optical fiber' requires drawing a fiber from a sacrificial preform, one can draw a fiber from the LeNoane or Sterling sacrificial preform.

As to the sacrificial preform being "lower" - LeNoane clearly has this. As to Sterling - it would have been obvious to draw the fiber downward - Applicant admits in the "Background" portion of the specification that this is typically how it is done. Examiner also takes Official notice that fibers are typically drawn downward - the

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theoretical basis therefore: for gravity assist, (especially during the initial gob drop to start the fiber draw). Also, gravity is uniform circumferentially when drawn downward but not when done horizontally.

Claims 23-31 are met for the reasons given in the prior Office action.

Response to Arguments

Applicant's arguments filed 11 March 2005 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Therefore, it does not much matter that Gwo does not teach bonding fiber preforms: the combination as a whole provides for such. Applicant has not indicated why Gwo's lack is relevant in view of the fact that the other references disclose this feature that Gwo lacks.

It is also argued that none of the references teaches the direct bonding of sacrificial fiber preforms. The references do not appear to use the term "sacrificial preform" however, it is deemed that any of the LeNoane or Sterling preforms can be considered to be sacrificial preforms. The term "sacrificial" is deemed to be just an intended use – and does not affect the structure. Examiner could not find any

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definition for "sacrificial preform" that signifies anything other than intended use. Nor has applicant pointed out any definition.

The specification must clearly set forth the definition explicitly and with reasonable clarity, deliberateness and precision. *Teleflex Inc. v. Ficosa North America Corp.*, 63 USPQ2d 1374, 1381 (fed. Cir. 2002), *Rexnord Corp. v. Laitram Corp.* 60 USPQ2d 1851, 1854 (fed. Cir. 2001) and MPEP 2111.01.

A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

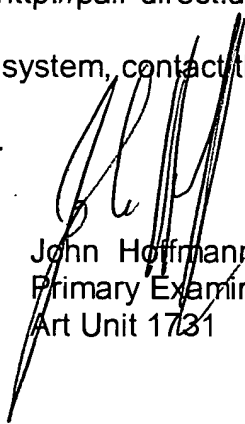
Presently, the prior art preforms are deemed capable of performing the intended sacrificial use – thus they meet the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John Hoffmann
Primary Examiner
Art Unit 1731

6-7-05

jmh